DETAILED ACTION

Claims 18, 20, 23-27, 47, 49, and 54 are pending for examination.

Claims 18, 20, 23-27, 47, 49, and 54 are allowed.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes
and/or additions be unacceptable to applicant, an amendment may be filed as provided
by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be
submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview
with Tom Bilodeau (Reg. 43,438) on 08 July 2010.

The application has been amended as follows, based on last filed claims dated
22 April 2010:

1.   Claim 1 has been amended as follows:

A packet transfer device for controlling a transfer of a plurality of packets
between a client and a destination, said packet transfer device comprising:

a DNS proxy unit for receiving a name resolution response message transmitted
from a name resolution server to said client, said name resolution response message
including an IP address corresponding to said destination and one or more packet
transfer information fields, and for rewriting a routing table of said DNS proxy unit to
include said IP address and said one or more packet transfer information fields,

wherein said DNS proxy unit is configured to control said transfer of the packets

between said client and said destination according to said one or more packet transfer

information fields,

wherein said one or more packet transfer information fields include at least one

of a packet transfer priority field, a logical network identifier, and a logical channel

identifier,

wherein said one or more packet transfer information fields include the packet

transfer priority field,

wherein the packet transfer device further comprises a user information obtaining

unit which obtains attribute information regarding a sender of a name resolution request

message transmitted from said client to said name resolution server,

wherein the attribute information is obtained based on a user information

database in which attribute information for a user is registered, the attribute information

comprising a log-in ID, IP address, and reference destination,

wherein said DNS proxy unit, upon receiving said name resolution request

message, obtains said attribute information regarding the sender of said name

resolution request message through said user information obtaining unit and transmits

said name resolution request message with said attribute information added to said

name resolution server, and wherein said attribute information includes at least one of a

login identifier of the sender, information identifying a geographic location of the sender,

information identifying a type of a sender device used by the sender in sending the

name resolution request message, and information identifying a type of a network

coupling the sender device to the name resolution server,

    wherein the packet transfer device comprises at least a processor.

2.   Claim 27 has been amended as follows:

    The packet transfer device as set forth in claim 23, further comprising:

    a user authentication unit which identifies and authenticates a user based on the

attribute information, and

    a user information updating unit which updates the contents of said user

information database based on attribute information regarding said user obtained at the

time of authentication.

3.   Claim 47 has been amended as follows:

    A non-transitory computer-readable storage medium storing computer-readable

instructions, said computer-readable instructions configured to cause a computing

device to:

    perform a proxy function of receiving a name resolution response message

transmitted from a name resolution server to a client, said name resolution response

message including an IP address according to a destination and one or more packet

transfer information fields, and rewriting a routing table to include said IP address and

said one or more packet transfer information fields; and

    control a transfer of a plurality of packets between said client and said destination

according to said one or more packet transfer information fields,

wherein said one or more packet transfer information fields include at least one of a packet transfer priority field, a logical network identifier, and a logical channel identifier,

wherein said one or more packet transfer information fields include the packet transfer priority field,

wherein said computer-readable instructions are further configured to cause the computing device to obtain attribute information regarding a sender of a name resolution request message transmitted from said client to said name resolution server and to transmit said name resolution request message with said attribute information added to said name resolution server,

wherein the attribute information is obtained based on a user information database in which attribute information for a user is registered, the attribute information comprising a log-in ID, IP address, and a reference destination,

wherein said attribute information includes at least one of a login identifier of the sender, information indicating a geographic location of the sender, information indicating a type of a sender device used by the sender in sending the name resolution request message, and information indicating a type of a network coupling the sender device to the name resolution server.

4.   Claim 54 has been amended as follows:

A packet transfer method of transferring a plurality of packets between a client and a destination, wherein the client comprises at least a processor, said method comprising:

receiving a name resolution response message transmitted from a name resolution server to said client, said name resolution response message including an IP address corresponding to said destination and one or more packet transfer information fields;

rewriting a routing table to include said IP address and said one or more packet transfer information fields; and

controlling said transfer of said packets between said client and said destination according to said IP address and said one or more packet transfer information fields,

wherein said one or more packet transfer information fields include at least one of a packet transfer priority field, a logical network identifier, and a logical channel identifier,

wherein said one or more packet transfer information fields include the packet transfer priority field,

wherein said method further comprises:

obtaining attribute information regarding a sender of a name resolution request message transmitted from said client to said name resolution server;

wherein the attribute information is obtained based on a user information database in which attribute information for a user is registered, the attribute information comprising a log-in ID, IP address, and reference destination; and

transmitting said name resolution request message with said attribute information added to said name resolution server, and

wherein said attribute information includes at least one of a login identifier of the sender, information indicating a geographic location o f the sender, information indicating a type of a sender device used by the sender in sending the name resolution request message, and information indicating a type of a network coupling the sender device to the name resolution server.

Allowable Subject Matter

5.   Claims 18, 20, 23-27, 47, 49, and 54 are allowed.

6.   The following is an examiner's statement of reasons for allowance:

7.   The closest prior art cited is Somasundaram (US 7 334 049) and Monteiro (US 7 228 359). Somasundaram discloses a packet transfer device for controlling a transfer of a plurality of packets between a client and a destinations, said packet transfer device, comprising a DNS proxy unit for receiving a name resolution response message transmitted from a name resolution server to said client, said name resolution response message including an IP address corresponding to said destination and one or more packet transfer information fields, and for rewriting a routing table of said DNS proxy unit to include said IP address and said one or more packet transfer information fields (column 7, line 63 to column 8, line 6), wherein said DNS proxy unit is configured to control said transfer of the packets between said client and said destination according to said one or more packet transfer information fields (column 7, line 63 to column 8, line 22), and wherein said one or more packet transfer information fields include at least one of a packet transfer priority field, a logical network identifier, and a logical channel identifier (column 11, line 10). Monteiro teaches a method for providing a DNS service

based on a client identifier (column 6, line 65 to column 7, line 9), wherein the client

identifier may be utilized based on a request sent to the DNS server by a DNS proxy

unit (column 3, lines 15-21).

8.   The prior art references of record do not teach alone or in combination all the

limitation together within independent claim 18. For example, the independent claim

contains the limitations a packet transfer device comprising a DNS proxy unit for

receiving a name resolution response message transmitted from a name resolution

server to said client, said name resolution response message including an IP address

corresponding to said destination and one or more packet transfer information fields,

and for rewriting a routing table of said DNS proxy unit to include said IP address and

said one or more packet transfer information fields, wherein said DNS proxy unit is

configured to control said transfer of the packets between said client and said

destination according to said one or more packet transfer information fields, wherein

said one or more packet transfer information fields include at least one of a packet

transfer priority field, a logical network identifier, and a logical channel identifier, wherein

said one or more packet transfer information fields include the packet transfer priority

field, wherein the packet transfer device further comprises a user information obtaining

unit which obtains attribute information regarding a sender of a name resolution request

message transmitted from said client to said name resolution server, wherein the

attribute information is obtained based on a user information database in which attribute

information for a user is registered, the attribute information comprising a log-in ID, IP

address, and reference destination, wherein said DNS proxy unit, upon receiving said

name resolution request message, obtains said attribute information regarding the
sender of said name resolution request message through said user information
obtaining unit and transmits said name resolution request message with said attribute
information added to said name resolution server, and wherein said attribute information
includes at least one of a login identifier of the sender, information identifying a
geographic location of the sender, information identifying a type of a sender device used
by the sender in sending the name resolution request message, and information
identifying a type of a network coupling the sender device to the name resolution server.
Somasundaram generally teaches routing DNS queries through a packet transfer
device. Monteiro generally teaches routing DNS queries to a DNS server based on a
client identifier that may be added by an intermediary device. However, neither
reference, teaches or suggests alone or in combination with other cited references the
combination of all limitations recited in the independent claim 18. Therefore,
independent claim 18, and also similar independent claims 47 and 54, along with their
dependent claims, contain allowable subject matter and are cited as allowable over the
prior art of record.

9.   Any comments considered necessary by applicant must be submitted no later
than the payment of the issue fee and, to avoid processing delays, should preferably
accompany the issue fee. Such submissions should be clearly labeled "Comments on
Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS RICHARDSON whose telephone number is (571) 270-1191. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2444